



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/821,147	04/08/2004	Gregory Richard Hintermeister	ROC920030375US1	8969

7590
Grant A. Johnson
IBM Corporation
Dept. 917
3605 Highway 52 North
Rochester, MN 55901-7829

07/06/2007

EXAMINER

LEVINE, ADAM L

ART UNIT	PAPER NUMBER
----------	--------------

3625

MAIL DATE	DELIVERY MODE
-----------	---------------

07/06/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/821,147

Applicant(s)HINTERMEISTER, GREGORY
RICHARD**Examiner**

Adam Levine

Art Unit

3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6,9-14 and 17-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6,9-14 and 17-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's reply filed April 9, 2007, is responsive to the office action mailed November 14, 2006. In the April 9 reply, independent claims 1,5,9,13, and 17 are amended, along with dependent claims 10-12. Claims 7-8 and 15-16 are canceled. Claims 1-6,9-14, and 17-20 are therefore pending and considered in this office action.

Response to Amendment

Pertaining to claim rejections under 35 USC §112 in the previous office action

Claims 8 and 16 were rejected in the previous office action and applicant has canceled those claims in his reply. This rejection is moot.

Response to Arguments

Pertaining to claim rejections under 35 USC §101 in the previous office action

Applicant's arguments filed April 9, 2007, have been fully considered but they are not persuasive. Claims 9-12 have been amended to recite a storage medium, rather than a signal bearing medium. The examiner appreciates the attempt to mend the claims, but the amended claims continue to bear the same basic defect. Please see below under *Claim Rejections – 35 USC §101*.

Pertaining to claim rejections under 35 USC §102 in the previous office action

Applicant's arguments filed April 9,2007, have been fully considered but they are not persuasive. The amendments change "the problem" from a condition or function to

“a status of a job.” Thus the independent claims are essentially directed to determining a status of a job, and finding an on-demand task that addresses the status of a job. This is still extremely broad. Although the exact portion of the prior art previously cited and referred to in applicant's response may no longer apply, the art itself is still applicable.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. **Claims 9-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.** Data structures not claimed as embodied in computer-readable media are descriptive material. The claim is directed at a storage medium encoded with instructions not claimed as embodied in a computer-readable medium and not implemented in a computer apparatus. The phrasing makes clear that it is the storage medium encoded with instructions itself that is being claimed rather than the method embodied thereon or its embodiment within a medium that is part of a functioning system or apparatus.

Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between

Art Unit: 3625

the data structure and other claimed aspects of the invention that permit the data structure's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory.

Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer that permit the computer program's functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. Accordingly, it is important to distinguish claims that define descriptive material per se from claims that define statutory inventions. MPEP 2106 IV B 1 (a).

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs that impart functionality when employed as a computer component. (The definition of "data structure"

is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993.) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material per se. Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759. When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized.

Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and Warmerdam, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Data structures not claimed as embodied in computer-readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

These particular claims, by way of illustration, could be directed to a printed page with instructions written thereon.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being rejected by Teper (US Patent No. 5,815,665).

Teper teaches all the limitations of claims 1-20. For example, Teper teaches a method for brokering tasks that comprises providing appropriate tasks to users, with said tasks meeting the needs presented by specific contexts and problems. Teper further discloses:

- determining a problem from a context: problem comprises a status of a job in a computer system (see at least figs.2-3, column 1 lines 13-40, column 3 lines 5-18, column 8 line 63-column 9 line 37, column 10 line 44-column 11 line 45. Please note: for example, the authentication process is a job, the various stages and levels of authentication the status of the job. The responses available to authentication requests are examples of on-demand tasks in this context. There are many additional services available within the prior art that would also involve jobs, tasks, and various statuses of jobs in various stages of process).
- finding an on-demand task associated with the problem: on-demand task addresses the problem (see at least figs.2-3, column 3 lines 5-18, column 8 lines

Art Unit: 3625

7-19, line 63-column 9 line 49; column 10 line 44-column 11 line 45, column 12 line 14-29).

- presenting a notification of the availability of the on-demand task: displaying an icon indicating that the on-demand task is available (see at least figs.2-4, column 3 lines 58-64, column 4 lines 15-27, column 9 lines 38-49. Please note: The displayed notification is the functional element. The image used, whether it is an icon, symbol, word, or other form, is descriptive material and is not functionally involved in the recited steps of the method. Because it has no functional role in the method it is non-functional descriptive material. This descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381 , 1385, 217 USPQ 401, 404 (Fed. Cir. 1983). MPEP 2106).
- passing the context to the on-demand task: in response to a selection of the icon (see at least abstract, figs.2,6; column 3 line 65-column 4 line 14, column 9 lines 38-49, column 18 line 39 – column 19 line 10. Please note: see above with regard to the nonfunctional descriptive nature of the icon. The functional element here (or the method step) is interpreted as the means for choosing or choice of the displayed notification corresponding with the on-demand task.)
- determining whether a use of the on-demand task is available: (see at least abstract, figs.2-6, column 3 lines 58-column 4 line 14; column 9 lines 38-49).
- determining whether a user is authorized to use the on-demand task: (see at least abstract, figs.2-3,6; column 2 lines 31-48, 57-column 3 line 30; column 9

line 61-column 10 line 29); whether a user is authorized to purchase a use of the on-demand task (see at least abstract, figs.2,4-5; column 1 lines 41-49)

- processing a purchase of a use of the on-demand task: (see at least abstract, figs.2,4-5; column 1 lines 41-49).
- a processor, memory encoded with instructions (see at least abstract, fig.4, column 1 lines 13-23, column 2 lines 57-67, column 5 lines 26-32, column 26 lines 40-46 (claim 45)).

Pertaining to apparatus and system claims 5-8 and 13-16, respectively

Rejection of claims 5-8 and 13-16 is based on the same rationale as noted above.

Pertaining to storage medium claims 9-12

Rejection of claims 9-12 is based on the same rationale as noted above.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 3625

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam Levine whose telephone number is 571.272.8122.

The examiner can normally be reached on M-F, 8:30-5:00 Eastern.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571.272.6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Adam Levine
Patent Examiner
June 23, 2007


YOGESH C. GARG
PRIMARY EXAMINER
TECHNOLOGY CENTER 3600